Wetlands PQS Memorandum

DATE 1/20/2016

TO Ryan Walkowiak, NDOR EDU

FROM Mary Schroer, NDOR EPU

SUBJECT Wetlands PQS Memo
Project No: STP-89-3(106)
Control No: 70838
Project Name: Stamford East & West

☒**A wetland delineation was completed on 6/1/2013**
Or
☐A desktop review was completed on Click here to enter a date.

Are there wetlands, stream channels, or other waters within the study area?
☒ Yes ☐ No

Will the action result in wetland impacts in accordance with Section 404 of the Clean Water Act and/or Nebraska State Title 117?
☒ Yes ☐ No ☐ Not Applicable

If the project is processed with a Nationwide Permit, is a Pre-construction Notification required?
☐ Yes ☒ No ☐ Not Applicable

Describe resources, <u>potential</u> impacts and anticipated permit type (*Include estimated permanent wetland impacts (acres). If known, also provide estimated temporary wetland impacts (acres), estimated channel impacts (linear feet/acres), special wetland areas, cause of impacts, and any Nationwide Permit information.*): Based on final 2Ws and DR290, permanent impacts to PEMA/C wetlands are estimated at 0.0129 acre and permanent stream channel impacts are approximately 20 feet (0.001 ac). Permanent impacts are less than 0.1 acre and therefore will not require mitigation. Temporary wetland (PEMA/C) impacts are estimated at 0.001 acres (30 foot lenth). This project will be permitted as a NWP 3(a)(c) non-notifying.

Cowardin Class Impacted (*Select all that apply*)
☒ Palustrine ☐ Riverine ☐ Lacustrine ☐ Not Applicable

Describe any coordination conducted to date with officials/agencies (*Include: Any coordination with USACE)*: None

Wetlands/Waters of the U.S. Mitigation
☐ On-Site/Permittee Responsible ☐ USACE Approved Mitigation Bank Site ☒ Not Applicable

Wetlands/Waters of the U.S. Commitments:

The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear "bed and Bank" channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas.

☒ All wetlands/waters within the project area that are not permitted for impacts will be marked on the 2W aerial sheets for the contractor as avoidance areas.

Select one of the following:

☐ No wetland impacts are anticipated for this project; however, if impacts are found during design, the required permits shall be obtained prior to letting. NDOR Environmental shall reevaluate the project for the change in impacts. All wetlands within the project area shall be marked on the project plans and on the Green Sheet for the Contractor as avoidance areas. (NDOR Design, NDOR Environmental)

☒ The project qualifies under Nationwide Permit # 3 (non-notifying). The contractor shall adhere to the permit conditions, including regional and general conditions, during construction. (Contractor)

☐ The project will require a Nationwide Permit for impacts to waters of the U.S. The permit shall be obtained prior to project letting. The contractor shall adhere to all permit conditions, including regional and general conditions, during construction. (NDOR Environmental, Contractor)

Project Description:

This 3R (Resurfacing, Restoration and Rehabilitation) project will resurface 6.56 miles of N-89 located in Furnas and Harlan Counties, starting 0.13 mile east of Nebraska Highway 46, at mile marker (MM) 52+23, and extending east to MM 58+77, 0.83 mile west of the Republican River. Construction may begin and/or end approximately 200 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement.

The existing roadway on this segment of N-89 consists of two 12-foot-wide asphalt lanes and 6-foot-wide earth shoulders.

This 3R (Resurfacing, Restoration and Rehabilitation) and DR-5 (New and Reconstructed Rural State Highway) project consist of performing a hydrated lime slurry stabilization of the asphalt roadway and overlaying the hydrated lime slurry stabilization with asphaltic concrete. The growth from this strategy will be used to widen the roadway two feet left and right, resulting in a 28-foot-wide surfaced top. A SPR asphaltic concrete overlay will be placed on top of the 28 ft. top resulting in a grade raise. The hydrated lime slurry stabilization, roadway widening, and resurfacing with asphalt includes the areas currently occupied by the railroad tracks at RP 58.62 and RP 58.77.

Prior to the hydrated lime slurry stabilization, existing railroad crossing surface will be removed and replaced with a full depth asphalt patch with subgrade preparation. The roadway where existing bridges are scheduled to be replaced with concrete box culverts (S089 05267, S089 05367, and S089 05581) will be built with an 8" x 28' Surface on Subgrade Preparation and to DR-5 standards. Mailbox turnouts will be resurfaced and/or constructed. Existing guardrail will be updated to current standards and the existing guardrail at station 36+00 will replaced with a cable guardrail on the right side only. Existing culvert ends with headwalls within the lateral & fixed obstacle clear zone will be extended or replaced with flared end sections, whichever is applicable. Structure Numbers S089-05267, S089-05367, and S089-05581 will be replaced with concrete box culverts. Structure Number S089-05737 will be repaired.

NDOR standard practice is that timber pile structures are not widened and, in the case of the replacement of Structure Numbers S089 05267, S089 05367, and S089 05581, a cost effective analysis determined that replacement with a concrete box culvert was the best alternative.

Scope details include:

- Grading beyond the hinge point will be required for the following work:
    - Culverts
    - Guardrail
    - Mailbox turnouts
    - Earth shoulder construction
    - Removal of old substructure
    - Roadway grading for culvert extensions
    - Flattening foreslopes
    - Drives and intersections
- 5 Culvert ends need extensions beyond the lateral obstacle clear zone.
- Guardrail
    - Remove and replace guardrail with grading beyond the hinge point.
- Bridges (Structure Numbers S089 05267, S089 05367, and S089 05581) will be replaced with concrete box culverts.
- A shoofly to the north may be needed to replace S089 0551 with a box culvert.
- The bridge (Structure Number S089 05737) will undergo repairs including Class 5 milling to remove asphalt overlay (full removal), partial and full depth deck repairs, 2-inch asphalt overlay with membrane EOF to EOF, and updating bridge rails. The existing guardrail will be removed and replaced.
- Asphalt patching operations will be performed prior to resurfacing.
- Existing surfaced driveways and intersections will be resurfaced.
- Rock or gravel will be placed behind driveways and intersections to match the new asphalt.
- Mailbox turnouts will be constructed.
- Surfacing will be placed under the guardrail.
- The existing earth shoulders will be brought up to match the new asphalt.
- The trench widening operation will remove material adjacent to the existing surfacing. This trench will be filled with recycled material.
- Additional project surveying and staking will be required.
- Areas disturbed during construction will be stabilized utilizing methods of erosion control as shown in the Storm Water Pollution Prevention Plan (SWPPP).
- Permanent pavement markings will be applied to all new surfacing.
- Additional property rights may be required to build this project.
- Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.
- This project will be constructed under traffic with lane closures controlled with approved temporary traffic control.